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AMENDMENTS TO THE CLAIMS:

Please replace the specification currently on file with the enclosed substitute specification. As required, both clean and marked-up versions are being submitted. No new matter is believed to have been entered.

AMENDMENTS TO THE CLAIMS:

This listing of claims replaces all prior versions and listings of claims in the application.

LISTING OF CLAIMS:

1. (Currently Amended) Control circuitry for use with an oscillator, comprising:
a control input configured to ~~receive~~ provide a modulation signal;
an oscillator comprising an oscillator input configured to receive a feed current and an oscillator output configured to provide a frequency-modulated signal; and
an amplitude control circuit comprising an amplitude control input that is connected to the oscillator output and an amplitude control output that is connected to the oscillator input to provide the feed current to the oscillator;
wherein the amplitude control circuit comprises internal circuitry configured to affect the feed current in response to the modulation signal.
2. (Previously Presented) The control circuitry of claim 1, wherein the internal circuitry comprises current switches that are connected in parallel.
3. (Previously Presented) The control circuitry of claim 2, wherein the current switches comprise current mirror circuits.
4. (Previously Presented) The control circuitry of claim 3, wherein the amplitude control

circuit further comprises a gain control circuit and a second current mirror circuit;

wherein the current mirror circuits connect to an output of the gain control circuit, the gain control circuit being configured to receive the oscillator output; and

wherein the second current mirror circuit provides the feed current to the oscillator input.

5. (Previously Presented) The control circuitry of claim 2, further comprising a control circuit, the control circuit comprising the control input and an output that is connected to control inputs of the current switches;

wherein the control circuit is configured to trigger the current switches in response to the modulation signal.

6. (Previously Presented) The control circuitry of claim 1, wherein the modulation signal is digitally coded using frequency shift keying.

7. (Currently Amended) The control circuitry of claim 1, wherein the oscillator ~~is~~ comprises a tunable oscillator that comprises at least one capacitive circuit that can be adjusted in response to a tuning voltage in order to affect an oscillation frequency of the oscillator.

8. (Currently Amended) The control circuitry of claim 1, wherein the oscillator ~~is~~ comprises an inductive-capacitor oscillator that comprises a resonant circuit, at least one capacitive circuit that is usable to affect a frequency of the resonant circuit, and at least one inductive circuit that is usable to affect the frequency of the resonant circuit.

9. (Currently Amended) The control circuitry of claim 1, wherein the oscillator ~~is~~ comprises a crystal oscillator comprising an oscillator crystal that is usable to affect an oscillation frequency of the oscillator.

10. (Previously Presented) The control circuitry of claim 3, wherein the modulation signal is digitally coded using frequency shift keying.

11. (Currently Amended) The control circuitry of claim 3, wherein the oscillator ~~is~~ comprises a tunable oscillator that comprises at least one capacitive circuit that can be adjusted in response to a tuning voltage in order to affect an oscillation frequency of the oscillator.

12. (Currently Amended) The control circuitry of claim 3, wherein the oscillator ~~is~~ comprises an inductive-capacitor oscillator that comprises a resonant circuit, at least one capacitive circuit that is usable to affect a frequency of the resonant circuit, and at least one inductive circuit that is usable to affect the frequency of the resonant circuit.

13. (Currently Amended) The control circuitry of claim 3, wherein the oscillator ~~is~~ comprises a crystal oscillator comprising an oscillator crystal that is usable to affect an oscillation frequency of the oscillator.

14. (Previously Presented) The control circuitry of claim 4, wherein the modulation

signal is digitally coded using frequency shift keying.

15. (Currently Amended) The control circuitry of claim 4, wherein the oscillator ~~is~~ comprises a tunable oscillator that comprises at least one capacitive circuit that can be adjusted in response to a tuning voltage in order to affect an oscillation frequency of the oscillator.

16. (Currently Amended) The control circuitry of claim 4, wherein the oscillator ~~is~~ comprises an inductive-capacitor oscillator that comprises a resonant circuit, at least one capacitive circuit that is usable to affect a frequency of the resonant circuit, and at least one inductive circuit that is usable to affect the frequency of the resonant circuit.

17. (Currently Amended) The control circuitry of claim 4, wherein the oscillator ~~is~~ comprises a crystal oscillator comprising an oscillator crystal that is usable to affect an oscillation frequency of the oscillator.